CLAIMS:

1. (Canceled)

2. (Previously presented) A three dimensional display, comprising:

a three dimensional matrix of light emitting elements capable of generating images in three dimensions; and

a base coupled to the three dimensional matrix, the base having electrical circuitry for powering and controlling the three dimensional matrix, wherein the light emitting elements are pixels, and wherein each of the pixels is a cube having a red anode, a blue anode, a green anode and a cathode at different vertices of the cube, ~~has a red light emitting element, a green light emitting element, and a blue light emitting element, and wherein the red light emitting element, green light emitting element and blue light emitting element each include a cell having an anode, a cathode,~~ of the pixels has a gas volume and a phosphorus material.

3. (Canceled)

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4. (Original) The three dimensional display of claim 2, wherein the red light emitting element, green light emitting element, and blue light emitting element each have an anode and a cathode.

5. (Original) The three dimensional display of claim 2, wherein an anode of one of the pixels is shared by at least one other pixel.

6. (Original) The three dimensional display of claim 2, wherein a face of one of the pixels is shared by another pixel.

7. (Original) The three dimensional display of claim 2, wherein a top face of a pixel is the bottom face of a neighboring pixel, and wherein the side of the pixel is the side of another neighboring pixel.

8. (Original) The three dimensional display of claim 2, wherein electrical connections between the pixels, signal sources and power sources are positioned in seams between pixels.

9. (Original) The three dimensional display of claim 2, wherein an anode bus line is positioned in a seam from a first anode of a pixel to a second anode of another pixel.

10. (Original) The three dimensional display of claim 2, wherein a first red anode ~~of a first red light emitting element~~ of a pixel is connected to a second red anode of ~~a second red light emitting element in~~ another pixel by a straight line bus connection along a seam in any direction in the three dimensional matrix.

11. (Original) The three dimensional display of claim 2, wherein a first green anode ~~of a first green light emitting element~~ of a pixel is connected to a second green anode of ~~a second green light emitting element in~~ another pixel by a straight line bus connection along a seam in any direction in the three dimensional matrix.

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12. (Original) The three dimensional display of claim 2, wherein a first blue anode ~~of a first blue light emitting element~~ of a pixel is connected to a second blue anode of ~~a second blue light emitting element in~~ another pixel by a straight line bus connection along a seam in any direction in the three dimensional matrix.

13. (Original) The three dimensional display of claim 2, wherein a first cathode of a first pixel is connected to a second cathode of a second pixel by a straight line connection along a seam in any direction in the three dimensional matrix.

14. (Original) The three dimensional display of claim 2, wherein the distance between two adjacent anodes is a square root of two multiplied by a length of one side of a pixel.

15. (Original) The three dimensional display of claim 10, wherein a distance between the first ~~anode~~ red and the second ~~anode of the first red light emitting element and the second red light emitting element~~ is twice the length of one side of a pixel.

16. (Original) The three dimensional display of claim 13, wherein a distance between the first cathode and the second cathode of first pixel and the second pixel is twice the length of one side of a pixel.

17. (Original) The three dimensional display of claim 11, wherein the distance between the first ~~anode~~ green and the second ~~anode of the first green light emitting element and the second green light emitting element~~ is twice the length of one side of a pixel.

18. (Original) The three dimensional display of claim 12, wherein the distance between the first ~~anode~~ blue and the second ~~anode of the first blue light emitting element and the second blue light emitting element~~ is twice the length of one side of a pixel.

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19. (Previously presented) The three dimensional display of claim 2, further comprising a control system that controls which of the light emitting elements in the three dimensional matrix are illuminated.

20. (Original) The three dimensional display of claim 19, wherein the control system controls color, intensity and duration of the light emitted by the light emitting elements in the three dimensional matrix.

21. (Original) The three dimensional display of claim 19, wherein the control system receives an input image coded in a three dimensional coordinate system.

22. (Original) The three dimensional display of claim 21, wherein the input image is received from one of a computer, television signal receiver, cable system receiver, satellite receiver, and a storage medium.

23. (Original) The three dimensional display of claim 21, wherein the control system pixelizes the input image for reproduction by the three dimensional display.

24. (Previously presented) The three dimensional display of claim 2, wherein the three dimensional matrix has a cube shape.

25. (Canceled)

26. (Previously presented) A three dimensional display, comprising:

a plurality of three dimensional light emitting elements configured into a three dimensional matrix of light emitting elements that emits light in three dimensions; and

a controller that controls the operation of the light emitting elements to generate a three dimensional image, wherein the light emitting elements are pixels, and wherein each of the pixels has a red light emitting element, a green light emitting element, and a blue light emitting element, and wherein the red light emitting element, green light emitting element and blue light emitting element each include a cell having an anode, a cathode, a gas volume and a phosphorus material.

27. (Canceled)

28. (Original) The three dimensional display of claim 26, wherein a cathode of one of the pixels is shared by one or more other pixels.

29. (Original) The three dimensional display of claim 26, wherein the red light emitting element, green light emitting element, and blue light emitting element each have an anode and a cathode.

30. (Original) The three dimensional display of claim 26, wherein an anode of one of the pixels is shared by one or more other pixels.

31. (Original) The three dimensional display of claim 26, wherein a face of one of the pixels is shared by another pixel.

32. (Original) The three dimensional display of claim 26, wherein a top face of a pixel is the bottom face of a neighboring pixel, and wherein the side of a pixel is the side of another neighboring pixel.

33. (Original) The three dimensional display of claim 26, wherein electrical connections between the pixels, signal sources and power sources are positioned in seams between pixels.

34. (Original) The three dimensional display of claim 26, wherein an anode bus line is positioned in a seam from an anode of a pixel to an anode of another pixel.

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35. (Original) The three dimensional display of claim 26, wherein a cathode line is positioned in a seam from a cathode of one pixel to a cathode of another pixel.

36. (Original) The three dimensional display of claim 26, wherein an anode of a red light emitting element of a pixel is connected to another anode of a red light emitting element in another pixel by a straight line bus connection along a seam in any direction.

37. (Original) The three dimensional display of claim 26, wherein an anode of a green light emitting element of a pixel is connected to another anode of a green light emitting element in another pixel by a straight line bus connection along a seam in any direction.

38. (Original) The three dimensional display of claim 26, wherein an anode of a blue light emitting element of a pixel is connected to another anode of a blue light emitting element in another pixel by a straight line bus connection along a seam in any direction.

39. (Original) The three dimensional display of claim 26, wherein a first cathode of a first pixel is connected to a second cathode of a second pixel by a straight line connection along a seam in any direction.

40. (Original) The three dimensional display of claim 26, wherein the distance between two adjacent anodes is the square root of two times the length of one side of a pixel.

41. (Original) The three dimensional display of claim 36, wherein the distance between the anodes of the red light emitting elements is twice the length of one side of a pixel.

42. (Original) The three dimensional display of claim 37, wherein the distance between the anodes of the green light emitting elements is twice the length of one side of a pixel.

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43. (Original) The three dimensional display of claim 38, wherein the distance between the anodes of the blue light emitting elements is twice the length of one side of a pixel.

44. (Original) The three dimensional display of claim 39, wherein the distance between the first cathode and the second cathode is twice the length of one side of a pixel.

45. (Previously presented) The three dimensional display of claim 26, wherein the controller controls the color, intensity and duration of the light emitted by the light emitting elements.

46. (Previously presented) The three dimensional display of claim 26, wherein the controller receives an input image that is coded in a three dimensional coordinate system.

47. (Original) The three dimensional display of claim 46, wherein the input image is received from one of a computer, television signal receiver, cable system receiver, satellite receiver, and a storage medium.

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48. (Original) The three dimensional display of claim 46, wherein the control system pixelizes the input image for reproduction by the three dimensional display.

49. (Previously presented) The three dimensional display of claim 26, wherein the light emitting elements are formed into a matrix having a cube shape.